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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,420	03/09/2001	Raymond G. Blair	WC0001-A	7956

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STEVEN WESEMAN
CTS CORPORATION
171 COVINGTON DRIVE
BLOOMINGDALE, IL 60108

EXAMINER
BOSWELL, ALAN M

ART UNIT	PAPER NUMBER
3729	13

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PR

Office Action Summary	Application No.	Applicant(s)	
	09/802,420	BLAIR ET AL.	
	Examiner	Art Unit	
	Alan M Boswell	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *04 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *27-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *10* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/4/02 paper no. 12 has been entered.

Claim Rejections - 35 USC § 103 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6081174 to Takei.

Regarding claim 27, Takei teaches forming a block of ceramic material (3a, 3b) (see Fig. 27) having an outer surface with at least one pair of opposing sides and defining a plurality of through holes (16a, 16b) extending between the opposing sides covering with a conductive coating, heat-treating the coated block (see col. 7, lines 35-

39) and ablatively etching a selected area of the block to form a pattern of metallized and unmetallized areas on the block wherein the step of ablatively etching is carried out such that the unmetallized area are recessed (43a) in to the block of ceramic material (see col. 8 ,lines 53-54 and Fig. 27) except it is two blocks instead of one integral block.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make one block, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art Howard v. Detroit Stove Works, 150 U.S. 164 (1893).

3. Claims 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takei as applied to claim 27 above, and further in view of US Patent No. 6154106 to De Lillo.

Regarding claims 28, 33 and 37: Takei teaches the above limitations but fails to teach a second step of heat-treating the patterned block.

De Lillo teaches the step of heat-treating the patterned block (see col. 10, lines 1-14) in order to maintain performance as the center frequency deceases.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the invention of Takei in light of the teaching De Lillo to heat-treat the patterned block in order to maintain performance as the center frequency deceases.

Regarding claims 31, 32, 34 and 36, Takei teaches using a scanning laser beam to ablatively etch the block (see col. 7, lines 34-39).

Regarding claim 30, Takei teaches the step of covering the block with a conductive coating includes contacting the block with a silver paste (see col. 7, lines 31-34).

Regarding claims 29 and 35,Takei fails to teach heating the patterned block to temperature sufficient to reduce the insertion loss.

De Lillo teaches heating the patterned block to temperature sufficient to reduce the insertion loss (see col. 12, lines 35-50) for the purpose of maintaining the performance as the center frequency decreases.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the invention of Takei in light of the teaching of De Lillo to heat the patterned block to temperature sufficient to reduce the insertion loss for the purpose of maintaining the performance as the center frequency decreases.

4. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takei in view of De Lillo as applied to claim 37 above, and further in view of US Patent 5512866 to Vangala.

Takei fails to teach having transmitter, antenna and receiver pads.

Vangala teaches having transmitter, antenna and receiver pads (see col. 2, lines 40-41) for the purpose of making the tuning the frequency more efficiently and effectively.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the invention of Takei and De Lillo in light of the teaching of Vangala in order to control the capacitive coupling in the dielectric filter.

Response to Arguments

5. Applicant's arguments filed 2/4/03 paper no. 12 have been fully considered but they are not persuasive.

Regarding claim 27, the applicant contends that the Takei does not teach ablative etching such that the unmetallized areas are recessed into the ceramic block material. The examiner traverses theses argument. The examiner contends that the Takei clearly discloses a recessed area 43a in the unmetallized part of the ceramic block (see Fig. 27).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the applicant's argues the functional structural elements of De Lillo assembly are entirely different and not combinable. The structural of the assembly is not important when the layers are combined together to form a ceramic block structure.

Regarding claims 29 and 35, the applicant contends that the De Lillo does not teach any heat treatment temperature to insertion-loss performance. However, the examiner traverses this argument. The examiner contends that the De Lillo clearly discloses a heat treatment range of temperatures tested resulting in minimal insertion-loss performance (see col. 12, lines 35-50).

Regarding claims 31, 32, 34 and 36, the applicant contends that the Takei does not teach using a scanning laser beam to ablatively etch the block. Examiner contends that irradiation of a laser beam would scan the object (see col. 7, lines 34-39) and because the applicant has not defined the term "scanning". The term "irradiation" performs an equivalent function.

Conclusion

6. This is a RCE of applicant's earlier Application No. 09/802420. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan M Boswell whose telephone number is (703) 305-0308. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3579 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2572.

Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 308-6789 or (888) 786-0101
Assignment Branch	(703) 308-9723
Certificates of Correction	(703) 305-8309
Drawing Corrections/Draftsman	(703) 305-8404/8335
Petitions/Special Programs	(703) 305-9285
Terminal Disclaimers	(703) 305-8408
PCT Help Desk	(703) 305-3257

If the information desired is not provided above, or a number has been changed, please call the general information help line below.

Information Help line	1-800-786-9199
Internet PTO-Home Page	http: www.uspto.gov

AB
March 20, 2003

A. DEXTER TUGBANG
PATENT EXAMINER